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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,119	06/22/2001	Takahiro Ito	Q62668	4996

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03/31/2003

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EXAMINER

MAKI, STEVEN D

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 03/31/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/886,119

Applicant(s)

ITO ET AL.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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- 1) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2) Claims 3-4 and 7-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 3 and 4, it is unclear what additional limitation of the tire is being claimed. What additional tire structure is required by claims 3 and 4?

In claim 7, the scope of protection afforded by the description of "incline in a direction of a side force" and "incline in a direction of a braking force" is unclear. Does claim 7 require the sub-groove to be inclined with respect to the radial direction? In other words, it is unclear with respect to what the sub-groove is inclined.

In claim 7, it is unclear which additional limitations, if any, are required by "being used for a steering wheel". Does claim 7 require a wheel instead of a tire?

As to claims 9, 10, 11, 12 and 13, it is unclear what additional limitation is being claimed. The difference in scope between claims 9 and 10 is unclear. One of ordinary skill in the art cannot determine if a tire falls within the scope of claim 9 or claim 10 if the tire is not mounted. Also, the tire of claim 9 can be mounted so as to satisfy claim 10 and the tire of claim 10 can be mounted so as to satisfy claim 9. As to claims 11-13, it is unclear if these claims are limited to a vehicle. With respect to claim 11, it is unclear if two tires are being described or if a single tire having two different offsets is being claimed.

In claims 16 and 17, it is unclear if these claims are limited to a vehicle having tires mounted thereon or tires or a tire? In other words, the scope and meaning of "a mounting structure of a tire" is unclear. The description of the tires in claims 16 and 17 including the repeated uses of an improvement wherein is confusing.

3) Claims 3-4 and 9-13 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 3-4 and 9-13 describe the intended use of the tire instead of an additional limitation of the tire.

4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6) Claims 1, 3, 4, 6, 7 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Herbelleau et al (US 4298046).

See figure 1 and figure 6. The claimed sub-groove reads on the slits of Herbelleau et al which are inclined with respect to the radial direction. The description

of central main portion fails to require only the central main portion to have the described inclination. Claims 1, 3, 4, 6, 7 and 16 fail to exclude the same tire having both types of slits.

7) Claims 1, 3, 4, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Europe '104 (EP 810104).

See figure 4. The claimed sub-groove reads on one of the sipes of Europe '104. The description of central main portion fails to require only the central main portion to have the described inclination.

8) Claims 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan '773 (JP 2-81773).

See figure 5. The claimed sub-groove reads on the "sub-groove" 11 of Japan '773. Claims 7-13 fail to require the sub-groove to completely cross the block. Claims 7-13 fail to require only the central main portion to have the claimed offset.

9) Claims 7-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Europe '884 (EP 485884).

See block 556 in figure 5. The claimed tire reads on the tire of Europe '884 having blocks 556. Note the sipe closest to the shortest diagonal. As to claim 14, note that the sipe closest to the shortest diagonal is clearly parallel to and offset from the shortest diagonal. The claims fail to exclude a straight sub-groove / sipe. The claims fail to exclude a block having more than one sub-groove / sipe.

10) Claims 7-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Landers et al (US 5824169).

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See figure 3. The claimed sub-groove reads on the sipe 17 of Landers et al. The sipe 17 of Landers has a shape and orientation similar to that of applicant's illustrated sub-groove. In any event: it would have been obvious to offset the inclined central portion of sipes 17 of Landers et al as claimed in view of Landers et al's teaching to incline the sipes 17 in a direction opposite that of the lateral grooves to control variation of the direction of principal lug stiffness so that the tire has better lateral stability, handling and wear; it being noted that in the large shoulder blocks, the inclined portion of one of the two sipes is below the short diagonal. The intended use language relating to the vehicle fails to require a tire different from that shown by Landers et al.

11) Claims 1-7, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers et al (US 5824169) as applied above and further in view of Europe '104 (EP 810104) and/or Lurois (US 5896905).

As to claims 1-7, 15 and 16, it would have been obvious to one of ordinary skill in the art to incline the sipes of Landers et al as set forth in claims 1-7, 15 and 16 in view of (1) Europe '104's suggestion to incline sipes with respect to the radial direction so that the tire has good braking properties on wet ground and good traction properties on snow and ice and /or (2) Lurois's suggestion to incline sipes with respect to the radial direction differently for front tires and rear tires to improve wear.

12) Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landers et al (US 5824169) in view of Europe '890 (EP 573890) and US 766 (US 5176766).

As to claim 17, it would have been obvious to mount front and rear Landers et al tires on a vehicle as claimed since Europe '890 suggests mounting directional tires on a

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vehicle such that the directional tread pattern for the front tires are mounted opposite of that for the rear tires and US 766 teaches mounting a tire having a tread similar to that of Landers et al (each of these tires having an aquachannel) either forward (for improved wet traction) or backward (for superior traction in snow).

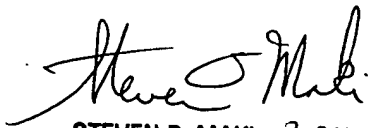
Remarks

- 13) The remaining references are cited of interest.
- 14) No claim is allowed.
- 15) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki
March 24, 2003


STEVEN D. MAKI 3-24-03
PRIMARY EXAMINER
GROUP 1300
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